### RUBIN AND RUDMAN LLP

COUNSELLORS AT LAW

50 Rowes Wharf . Boston, Massachusetts 02110-3319

Telephone: (617) 330-7000 • Facsimile: (617) 330-7550 • Email: Firm@rubinrudman.com

Andrew J. Newman Direct Dial: (617) 330-7031

E-mail: anewman@rubinrudman.com

January 18, 2006

### BY HAND

Mary L. Cottrell, Secretary Department of Telecommunications and Energy One South Station, 2<sup>nd</sup> Floor Boston, MA 02110

Re: Blackstone Gas Company - D.T.E. 05-50

Dear Secretary Cottrell:

Enclosed for filing please find the responses of Blackstone Gas Company to the First Set of Information Requests of the Department of Telecommunications and Energy. If you have any questions, please contact the undersigned.

Very truly yours

Andrew J. Newman

AJN/lms Enclosures

cc: John J. Geary, Hearing Officer

Andreas Thanos, Asst. Director, Gas Division Cynthia Bradbury, Analyst, Gas Division Elizabeth Jackson, Analyst, Gas Division

**Blackstone Gas Company** 

D.T.E. 05-50

## FIRST SET OF INFORMATION REQUESTS OF THE DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

# BLACKSTONE GAS COMPANY D.T.E. 05-50

Question:

DTE 1-1: Refer to the Plan at 4. Please give a detailed explanation of how the Company

arrived at the monthly base use for its customers.

Response: The base use for each rate class is a simple average of the rate class use for July

and August.

D.T.E. 05-50

### FIRST SET OF INFORMATION REQUESTS OF THE DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

### **BLACKSTONE GAS COMPANY** D.T.E. 05-50

#### **Question:**

DTE 1-2:

Please confirm that the National Weather Service owns, operates, and maintains the West Medway weather reporting station. Also explain whether the weather reporting station is permanently staffed by weather personnel or if the station is automated. In addition, please discuss if there have been any problems associated with either the mechanical equipment at the station or actual measurement data.

Response: The organization that provided the weather data, the Northeast Regional Climate Center, advised the Company that the National Weather Service owns and maintains the West Medway weather station. The Company does not know the maintenance or operating history of the station.

D.T.E. 05-50

### FIRST SET OF INFORMATION REQUESTS OF THE DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

### **BLACKSTONE GAS COMPANY** D.T.E. 05-50

#### Ouestion:

DTE 1-3:

Refer to the Company's filing at 7. Explain what was deficient about Blackstone's external demographic equation and the data used in the equation applied in Blackstone Gas Company, D.T.E. 03-73 (2004). As part of this response, explain in detail why the Company chose not to use external demographic data and its accompanying equation in this filing. Include all supporting data and assumptions in the Company's response.

Response: The tables in Attachment DTE 1-3 contain the regression output for the number of customers equations from the forecast in D.T.E. 03-73. The tables present the results of three regression equations of number of customers using three separate independent variables. The top two equations use external demographic data and the bottom equation uses a simple linear trend as the independent variable. The R-Square statistic shows the amount of variation in the dependent variable explained by the independent variable. The closer the reported number is to one the better explanatory value of the equation. For all rate classes, the equation using the time trend had the highest R-Squared and thus the highest explanatory value of all the equations.

> Further, the equations with the time trend also have higher F-statistics, and variable Tstatistics. The F-statistic is a measure of the "goodness of fit" or quality of the equation. The higher the F-statistic the better the equation fits the data. The T-statistics are a measure of the appropriateness of the individual independent variables in explaining the dependent variable. The higher the T-statistic (in absolute value) the more power the independent variable has in predicting the dependent variable.

An examination of the regression output from the Appendix of the forecast in this docket shows R-square, F-statistic, and T-statistics of similar magnitude to the 2004 forecast equations which are of the same functional form.

**Blackstone Gas Company** 

D.T.E. 05-50

# FIRST SET OF INFORMATION REQUESTS OF THE DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

# BLACKSTONE GAS COMPANY D.T.E. 05-50

Question:

DTE 1-4: Refer to the Company's filing at 7. Explain in detail why the Company's equation using

internal data was "far superior" to Blackstone's external demographic data equation.

Response: Please see the response to DTE 1-3

Blackstone Gas Company
D.T.E. 05-50

## FIRST SET OF INFORMATION REQUESTS OF THE DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

## BLACKSTONE GAS COMPANY D.T.E. 05-50

#### Question:

DTE 1-5:

Refer to Blackstone's filing at 6 ("Forecast Methodology"). Please explain in detail (with all supporting data and assumptions) the basis for the Company's assertion that, due to growth in sales and residential customers, the "... forecast presented in this filing is a combination of statistical analysis using available historical data and judgment based on discussions with the Company." Also explain (1) what factors and considerations comprise Blackstone's "judgment;" (2) how this "judgment" complements statistical analysis using historical data; (3) what were the substantive considerations at these discussions based on; and (4) who were the parties involved in these discussions?

Response:

In developing the demand forecast, the outlook for customer additions was discussed with the Company's president. Specifically, the discussion centered on housing and real estate development in the Company's service territory and inquiries or requests for new service the Company has received from developers. These discussions were used to inform the decision on which time period of historical data to use in developing the forecast. Given the outlook for new customer additions from discussions with the Company, a forecast using the entire data set would clearly be too low. Similarly, a forecast using the 3 and 5 year data intervals is not appropriate either as the historical growth rates are not reasonable expectations of sustainable growth. Further, the shorter data sets are vulnerable to statistical error due to the small sample size.

D.T.E. 05-50

## FIRST SET OF INFORMATION REQUESTS OF THE DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

## BLACKSTONE GAS COMPANY D.T.E. 05-50

Question:

DTE 1-6: Please demonstrate how the Company's forecast provides a sound basis for resource planning

decisions.

Response: In order for a forecast to provide a sound basis for resource planning decisions it must be based

on accurate, complete historical data and utilize a reasonable statistical projection method. The Company's forecast satisfies both of these requirements. First, the data used in the forecast is actual billing data captured from customer meter reads. The data is not corrected or adjusted in any way except to normalize for the effect of weather. The data used is the Company's complete historical record. While the equation that is used to project customers and sales uses a smaller sample of data, the entire data set was examined while developing the regression

equations used in the projection.

Second, the Company uses a reasonable statistical projection methodology. The Company uses a linear regression methodology which is a widely used and accepted method of forecasting. Further, an examination of the regression statistics for the equations shows them to be accurate and robust.

**Blackstone Gas Company** 

D.T.E. 05-50

## FIRST SET OF INFORMATION REQUESTS OF THE DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

# BLACKSTONE GAS COMPANY D.T.E. 05-50

Question:

DTE 1-7: Refer to Blackstone's filing at 7-8. Please explain in detail (with all supporting data and

assumptions) why the models used in this filing reflect a lesser growth rate than that currently

being experienced by the Company.

Response: Please see the response to DTE 1-5

D.T.E. 05-50

## FIRST SET OF INFORMATION REQUESTS OF THE DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

## BLACKSTONE GAS COMPANY D.T.E. 05-50

**Question:** 

DTE 1-8: Please describe the factors (with all supporting data and assumptions) that lead to the

"significant growth" in customers as stated in the Company's filing at 7.

Response: The Company has experienced significant housing development in its service territory. This

new house construction is the main factor in the Company's growth in customers.

D.T.E. 05-50

## FIRST SET OF INFORMATION REQUESTS OF THE DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

## BLACKSTONE GAS COMPANY D.T.E. 05-50

**Question:** 

DTE 1-9: Please summarize succinctly how Blackstone's filing accurately projects the gas sendout

requirements of the Company's market area.

Response: As is detailed in the Company's filing, the forecast uses a regression equation of degree days

and a time trend to forecast sales. The regression statistics show a very strong and predictive

relationship. The R-square, F-statistic, and T-statistics are all very high. Further, the forecasted growth rate in sales is in a reasonable range and the resulting use per customer is

similar to recent history.

D.T.E. 05-50

### FIRST SET OF INFORMATION REQUESTS OF THE DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

### **BLACKSTONE GAS COMPANY** D.T.E. 05-50

Ouestion:

DTE 1-10: Please summarize how Blackstone's filing ensures a necessary energy supply for its customers.

Response: The Resource Assessment section of the Company's filing describes the resources available to meet its customers' needs. As the section states, the Company has up to 2,000 Dth/day of supply to serve load. Peak design day load is forecast to be only 1,328 Dth/day in 2005 increasing to 1,578 Dth/day in 2010. The current supply arrangement more than meets the Company's present and future needs as well as providing for higher than forecast growth in customers and sales.

D.T.E. 05-50

### FIRST SET OF INFORMATION REQUESTS OF THE DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

### **BLACKSTONE GAS COMPANY** D.T.E. 05-50

Ouestion:

DTE 1-11: Please refer to D.T.E. 03-73, at 2. Please demonstrate how the Company's long-range supply forecast is reviewable, appropriate, and reliable. Use all supporting data and assumptions in the Company's response.

Response: A forecast is reviewable if it contains enough information to allow a full understanding of the forecast methodology. The Company's forecast presents the data used in the forecast, the results of the regression equations and a description of the process used in performing the analysis.

> A forecast is appropriate if it is technically suitable to the size and nature of the particular gas company. Blackstone utilizes a linear regression methodology for its projections which is consistent with the approach other Massachusetts LDC's use in forecasting. Regression forecasting is a widely used and accepted forecasting method.

> A forecast is reliable if it provides a measure of confidence that the gas company's assumptions, judgments, and data will forecast what is most likely to occur. The regression statistics of the equations used by the Company indicate that the equations are a good fit to the data and have a high level of explanatory power which indicates a reliable analysis and forecast. In addition, the forecast values that result from the equations are in a reasonable range compared to historical data. That is, the forecast is not vastly different from what has been experienced by the Company in the recent past.

For these reasons the Company believes its forecast is reviewable, appropriate, and reliable.